

N-SHAPED BACKFLOW PREVENTOR

## ABSTRACT OF THE DISCLOSURE

5 A backflow preventor with increased performance, and  
increased ease of installation is provided. The check valves  
are configured to assist in redirecting flow along the desired  
pathway, when they are in the open position. The pathway is  
designed so that the number of changes of flow direction of the  
average streamline flow is reduced, preferably being about  
10 180°. The check valves are configured to reduce or eliminate  
divergent flow around the edges of the valve disks. A check  
valve with a reduced hold-open pressure includes a biasing  
device, such as a spring, directly connected to a pivoting  
clapper at one end and to the valve body at the other end. No  
15 intervening pivoting links are used between the spring and the  
clapper. Preferably, the clapper is connected only by being  
pivoted to the valve body and by the spring connecting it to  
the valve body.

20

a:13119-1-1.app  
RLH/acg